

CLAIMS

1. An oligonucleotide primer designed based on any nucleotide sequence selected from nucleotides 41 to 256 of the nucleotide sequence of an RNA polymerase of the SARS coronavirus as shown in SEQ ID NO: 1 or a nucleotide sequence complementary thereto.

2. The oligonucleotide primer according to claim 1 comprising at least 15 continuous nucleotides selected from the nucleotide sequences as shown in SEQ ID NOs: 2 to 13 selected from the nucleotide sequence of a RNA polymerase of the SARS coronavirus or a nucleotide sequence complementary thereto.

3. The oligonucleotide primer according to claim 1 or 2 consisting of the nucleotide sequence selected from the following nucleotide sequences (a) to (d), provided that nucleotide sequence regions F3c, F2c, and F1c are selected from the 3'-terminus and nucleotide sequence regions R3, R1, and R1 are selected from the 5'-terminus of the target nucleic acid of the SARS coronavirus, and nucleotide sequences complementary thereto are determined to be F3, F2, and F1 and R3c, R2c, and R1c, respectively:

(a) a nucleotide sequence having the F2 region and the F1c region of the target nucleic acid at the 3'-terminus and the 5'-terminus, respectively;

(b) a nucleotide sequence having the F3 region of the target nucleic acid;

(c) a nucleotide sequence having the R2 region and the R1c region of the target nucleic acid at the 3'-terminus and the 5'-terminus, respectively; and

(d) a nucleotide sequence having the R3 region of the target nucleic acid.

4. The oligonucleotide primer according to any of claims 1 to 3 capable of amplifying a SARS coronavirus-specific nucleotide sequence and consisting of a nucleotide sequence selected from the following (e) to (h) from the 5'-terminus toward

the 3'-terminus:

(e) 5'-(a nucleotide sequence complementary to the nucleotide sequence as shown in SEQ ID NO: 2)-(any nucleotide sequence comprising 0 to 50 nucleotides)-(the nucleotide sequence as shown in SEQ ID NO: 3)-3';

(f) 5'-(the nucleotide sequence as shown in SEQ ID NO: 5)-(any nucleotide sequence comprising 0 to 50 nucleotides)-(a nucleotide sequence complementary to the nucleotide sequence as shown in SEQ ID NO: 6)-3';

(g) 5'-(a nucleotide sequence complementary to the nucleotide sequence as shown in SEQ ID NO: 8)-(any nucleotide sequence comprising 0 to 50 nucleotides)-(the nucleotide sequence as shown in SEQ ID NO: 9)-3'; and

(h) 5'-(the nucleotide sequence as shown in SEQ ID NO: 11)-(any nucleotide sequence comprising 0 to 50 nucleotides)-(a nucleotide sequence complementary to the nucleotide sequence as shown in SEQ ID NO: 12)-3'.

5. A method for detecting the SARS coronavirus comprising amplifying a target nucleic acid region of the SARS coronavirus using the oligonucleotide primer according to any of claims 1 to 4.

6. The method according to claim 5, wherein a target nucleic acid region of the SARS coronavirus is amplified by the LAMP method.

7. A method for diagnosing severe acute respiratory syndrome (SARS) comprising diagnosing infection with the SARS coronavirus by detecting amplification of a target nucleic acid region of the SARS coronavirus using the oligonucleotide primer according to any of claims 1 to 4.

8. A kit used for a method for diagnosing severe acute respiratory syndrome (SARS) comprising the oligonucleotide primer according to any of claims 1 to 4.